REMARKS

Claims 1-3 and 5-32 are pending. Claims 1, 3-5, 8-10, 12-16, and 18-20 are rejected under 35 U.S.C. § 102(b). Claims 2, 6-7, 11, 17, and 21 are rejected under 35 U.S.C. § 103(a). Claims 1-3 and 5-13 have been amended. Claim 4 has been canceled. New claims 22-32 have been added.

Examiner has not considered the printed publication from the information disclosure statement filed on January 22, 2002. A new information disclosure with a copy of the printed publication "Supplement to IEEE Standard for Information technology" is included with this response. Applicant believes section 18.4.8.4 (page 58) as described in the Background of the Invention at page 1, line 20 through page 2, line 9 is most relevant.

Examiner has not considered reference DE 19651709 (A1) which was previously presented in the German language without any explanation of relevance to the instant application. This reference resulted from a European search report. Applicant, therefore, has no idea why it might be relevant. A copy of the English language abstract, which is included in the present response, indicates it discloses a frequency jumping method in a network and is unrelated to wireless communication. Applicant believes it is, at most, cumulative with other cited references.

The paragraph at page 6, line 15 is rewritten to change reference numeral 14 to 15 at page 7, line 11, as noted by Examiner.

Independent claims 1 and 13 are rejected as being anticipated by Van De Berg (U.S. Pat. No. 5,907,812) under 35 U.S.C. § 102(b). Claim 1, as amended, recites "A method of selecting a plurality of frequency bands for use in a desired wireless communication from among a plurality of frequency bands available to be used for the desired wireless communication, comprising: passively monitoring the plurality of frequency bands to determine interference information for each of the frequency bands; *combining the interference information of said each of the frequency bands to produce a signal quality indication*; and selecting the plurality of frequency

bands for the desired wireless communication in response to the signal quality indication." (emphasis added). This method of summing interference levels of individual frequency bands is described in detail at page 8, lines 3-8 and at page 10, lines 2-15 of the instant application.

By way of contrast, Van De Berg discloses comparison of individual narrow band frequencies against a threshold value to determine that each narrow band frequency is essentially free of interference. (Figure 1, col. 9, lines 6-13). Thus, interference at each individual narrow band frequency must be less than a threshold value or all the narrow band frequencies that produce a wide band carrier are rejected.

The present invention advantageously combines interference information of individual narrow band frequencies to produce a signal quality indication. It then uses the signal quality indication to select an acceptable wide band carrier. In this manner, individual narrow band frequencies with relatively higher levels of interference may still be acceptable for wide band communication. Moreover, when many narrow band frequencies of the wide band carrier have an interference level near a predetermined threshold level, the wide band carrier might be deemed acceptable according to Van De Berg. The present invention, however, might advantageously reject the wide band carrier due to the cumulative interference level.

The foregoing limitations of independent claim 1 and depending claims 3-5, 8-10, and 12 are neither taught nor suggested by Van De Berg. Thus, applicant respectfully submits that claims 1, 3-5, 8-10, and 12, as amended, are patentable under 35 U.S.C. § 102(b).

Independent claim 13, as amended, recites "A wireless communication station, comprising: an antenna for use in wireless communications; a band selection controller coupled to said antenna for selecting a frequency band for use in a desired wireless communication from among a plurality of frequency bands available to be used for the desired wireless communication; said band selection controller operable for passively monitoring at least one of the available frequency bands to determine whether the at least one frequency band is acceptable

for the desired wireless communication; *said band selection controller operable for selecting a bandwidth of the at least one of the available frequency bands*; and said band selection controller further operable for selecting the at least one frequency band for the desired wireless communication if the at least one frequency band is determined to be acceptable." (emphasis added). This method of bandwidth selection is described in detail at page 4, lines 9-14 and page 10, lines 2-5.

Van De Berg fails to disclose variable bandwidth selection of the present invention. Van De Berg discloses (Figure 7) that individual carrier positions are scanned 2 to find an acceptable communication bandwidth 6. (col. 9, lines 4-30). Van De Berg fails to teach or suggest that either a narrow or wide bandwidth might be passively monitored as in the present invention. This bandwidth selection advantageously eliminates the need to scan all individual narrow band frequencies where interference levels are low. Access times of the wireless communication system are greatly reduced. Thus, applicant respectfully submits that claims 13-20, as amended, are patentable under 35 U.S.C. § 102(b).

Applicant acknowledges the rejections of claims 2, 6-7, 11, 17, and 21 under 35 U.S.C. § 103(a), but considers them moot in view of the present amendment as discussed.

New claims 22-32 recite "A method of selecting a frequency band for use in a desired wireless communication from among a plurality of frequency bands to be used for the desired wireless communication, comprising: *selecting the frequency band*; *selecting a bandwidth of the frequency band*; passively monitoring the frequency band to determine whether the frequency band is acceptable for the desired wireless communication; and selecting the frequency band for the desired wireless communication if the frequency band is determined to be acceptable by said passive monitoring." (emphasis added). These limitations are described in detail at page 4, lines 9-14 and page 10, lines 2-5. As previously discussed, Van De Berg fails to disclose these limitations. Thus, applicant believes new claims 22-32 are patentable in view of the cited references.

In view of the foregoing, applicants respectfully request reconsideration of claims 1-3 and 5-21 and allowance of claims 1-3 and 5-32. If the Examiner finds any issue that is unresolved, please call applicant's attorney by dialing the telephone number printed below.

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METHOD FOR OPERATING A NETWORK OF SECONDARY USERS

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Abstract not available for WO9826516

Abstract of correspondent: **DE19651709**

The invention describes a method for operating a network of secondary users (13) which uses a circuit of channels (f(K)) in a frequency spectrum (23) used by primary users (24, 25, 26) in the frequency jumping method for data transmission. A channel (f60) selected each time by the network of secondary users (13) is listened to before a possible data transmission and thus checked for whether primary users (24, 25, 26) are using this channel (f60) at a given time. Depending on the result of this examination, the network of secondary users (13) either transmits data via the selected channel (f60) or selects a new channel for examination and possible data transmission. In order to optimize data throughput, a circuit of the channels (f(K)) available for secondary users (13) is produced by removing, at least temporarily, a channel (f(K)) that is not only momentarily used by a primary user (24, 25, 26) from the circuit of channels.